

# Sustainability Reporting and Financial Performance of Oil and Gas Companies Listed in Nigeria

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DOI: <https://dx.doi.org/10.47772/IJRISS.2023.7012078>

Received: 15 November 2023; Revised: 01 December 2023; Accepted: 06 December 2023; Published: 05 January 2024

## ABSTRACT

“Financial performance (FP) is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. The term is also used as a general measure of a firm’s overall financial health over a given period.” A company’s financial performance refers to its health as a whole and the money it makes from its operations. Allocating resources effectively to meet objectives and boost profits is at the heart of this practice. The integrity of Nigeria’s oil and gas data relies on it completely. The sustainability of oil and gas in Nigeria is becoming questionable due to environmental factors that were not properly accounted for, and this prompted the researcher of this study to zero in on the effect of corporate social responsibility on the bottom lines of Nigeria’s publicly traded oil and gas firms. This study used an ex-post facto method for its research, using data from secondary sources such as annual reports and the Nigerian stock market. Inadequate CSR reporting and a failure to adequately reflect the financial performance of listed oil and gas firms have been noted in numerous works of literature. Using panel data analysis, the research correlated CSR reporting with the profitability indicators return on assets (ROA), return on equity (ROE), and return on capital employed (ROCE) of publicly traded oil and gas firms. This study looks at 10 Nigerian oil and gas firms that are traded on public markets. A filter was used with a census sampling strategy. Firms that (1) were permitted to trade before January 1, 2010, or (2) are still listed as of December 31, 2020 are eligible for review. In addition, the organization must publicly disclose yearly reports pertinent to the time under investigation. As a result of not meeting these criteria, four of the original eight firms were eliminated. Secondary sources were consulted to get the data needed. EVIEWS 10, a statistical programme, was used to analyze the data for this research. The regression analysis showed that CSR reporting increases ROA by a small but favourable amount. The return on equity, however, was shown to be positively correlated with environmental sustainability. Finally, a statistically insignificant positive correlation was found between social sustainability and return on investment (ROI). Therefore, this study concludes, based on the data provided, that sustainability reporting significantly affects the company’s financial performance for listed oil and gas businesses in Nigeria. Based on the findings of this study, oil and gas companies in Nigeria should make public disclosure of their sustainability efforts a top priority if they want to improve their bottom lines. Compliance in the industry as a whole can be improved if policymakers and standard-setting organizations work together to make it easier for industries to design and execute sector-specific reporting regulations.

**Keywords:** “Corporate Social Responsibility, Environmental Reporting, Oil and Gas Firms, Return on Assets, Return on Equity, and Sustainability Reporting,”

## INTRODUCTION

“Financial performance (FP) is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. The term is also used as a general measure of a firm’s overall

financial health over a given period.” In other words, Financial Performance (FP) refers to the term used to describe a company’s financial gain from investing in a certain business activity. Financial Performance is often referred to as the compensation received by an entrepreneur for allocating his resources to a certain business venture. The financial performance (FP) ratio is a measure of how well a business or organization’s leaders manage the wealth of its shareholders. The success of the company is assessed using its profitability as a criterion. It is a crucial factor in assessing the management team’s efficiency and effectiveness, especially when it comes to how shareholders’ investments are used to generate additional wealth as a return on their initial investment. According to Abbas and Oloroto (2018), the notion of FP may be defined as the process of valuing a company’s strategy and operations and determining its return on assets (ROA), return on equity (ROE), earnings per share (EPS), and net profit margin.

Companies are often structured with the primary goal of increasing the wealth of their owners. Businesses should place a greater emphasis on meeting the needs of those whose interests are directly or indirectly impacted by modern business practices than just maximizing profits. In most cases, companies aim to increase shareholder wealth while maintaining a healthy profit margin. Nevertheless, these organizations’ operations and activities often impact both their immediate surroundings and the broader environment. The concept of sustainability has been gaining traction in many parts of the world since 2010. Some businesses go above and beyond the required reporting of financial performance by disclosing non-financial metrics and initiatives that have a major impact on the company’s bottom line. Hence, it is important to keep tabs on the firm’s social effects throughout time by collecting and reporting relevant metrics. When it comes to answering stakeholders’ questions and easing their concerns, sustainability reporting (SR) is required.

The industry’s strategy will help with sustainability issues including waste reduction, pollution prevention, energy efficiency, and conservation. Companies that are able to successfully integrate sustainability and transparency do so not simply to win over society but also as a method of maximizing earnings, as pointed out by Nasiru, Abdulrahman, Babangida, and Abubakar (2020).

Many interactions between locals and oil companies occur throughout exploration, production, and marketing. Companies in the oil industry are under increasing pressure to support the development of the areas around their operations. The World Bank, national governments, and non-profits have all made similar claims about sustainability’s role in alleviating poverty and promoting local growth in recent years. If a business helps the community, it has social sustainability. Maintaining people’s political and economic rights is crucial to maintaining stable societies. Some examples are the right to fair and safe working conditions, the right to protect and promote one’s own culture, and the right to promote the long-term well-being of all humans. In turn, this might lead to increased trust among the many stakeholders, which in turn would help businesses achieve lower operating expenditures (Abdulsalam, Abdulraham, Garba, Mohammed, & Abubakar, 2020).

However, some who reject sustainability reporting believe that doing so may take management’s time and resources away from maximizing owner profitability. Literature has shown a causal relationship between transparency and corporate financial performance (Omesi & Berembo, 2020), even if more empirical study is needed to fully understand the benefits of sustainable business practices.

Although financial data has always played an important role in business decisions, the fact that traditional financial reporting seldom mentions the negative effects of a company’s activities on the environment means that it is likely to mislead many stakeholders. If companies want their reports to reflect the economic reality of their operations, they need to take into consideration the interests of other stakeholders, like the host community (Nugroho & Arjowo, 2014).

This is due to the fact that the business’s operations may have an impact on other parties; hence, it is necessary for the firm to record these operations in its reports in order to boost its sustainability by

improving its corporate image and goodwill. In today's corporate world, sustainability reporting is crucial since it gives companies an edge in the market while also meeting the informational demands of stakeholders on the firm's economic, social, and environmental activities. Companies in today's cutthroat business climate must prepare sustainability reports to get an edge in the marketplace and keep tabs on their social, environmental, and economic impacts. Sustainability reports are popular with buyers because modern consumers care more about how companies impact the well-being of their communities and the environment through their business practices.

South Africa is among the few developing nations that strongly supports sustainability reporting (Abdulsalam et al., 2020). According to Ordu and Amah (2021), the rise of other frameworks like Business in the Community (BITC), Business Ethics 100, Accountability Rating, and the Dow Jones Sustainability Index (DJSI) has made sustainability reporting less important. However, many organizations persist in dismissing the relevance of sustainability reporting. The Global Reporting Initiative is used by several of these models.

A company's "financial performance" is its overall health and the returns on its pooled resources that are put to use in its day-to-day operations. Williams (2020) defines "financial performance" as "a moderate increase in profitability indices as a result of the efficient use of available resources to achieve predetermined goals." It would be hard to exaggerate the importance of the oil and gas industry to Nigeria's economy and people's standard of living. The net effect of this is to increase the value of the company. According to Worae and Ngwakwe (2017), shareholders are concerned about the company's financial performance for their own financial and investment security. Strong financial performance has positive consequences for the overall country, which in turn benefits investors via dividend payments and other channels (Williams, 2020). Therefore, organizations will lose their competitiveness in the eyes of shareholders if they do not perform as anticipated by ensuring optimal use of common resources. Businesses that expand and pay dividends on a consistent basis as a result of increases in their worth are better able to maximize shareholder wealth (Nnamani et al., 2017).

As a consequence, the oil and gas industry in Nigeria is unsustainable on both an economic and social level. This is because they did not warn others about the potentially harmful conditions, since doing so would have necessitated action to remedy the situation and disrupted the social harmony necessary for a peaceful workplace (Mugambi & Fatoki, 2019). Businesses are learning that their actions have ecological and social consequences for the communities they operate in (and beyond) (Mugambi et al., 2019). In spite of this, the results of sustainable reporting are little understood. Using the aforementioned data, the study intends to investigate the effect of sustainability reporting on the bottom lines of Nigeria's publicly traded oil and gas firms.

There is a dearth of empirical research on the connection between sustainable practices and financial performance, say in Nigerian industrial product businesses (Abdulsalam et al., 2020). Therefore, it is found that the managers of Nigerian businesses do not place sufficient value on or emphasis on the importance of sustainable practices, which may help to explain the sector's mixed results (Abdulsalam et al., 2020). Therefore, it is important to consider how sustainability reporting affects the bottom lines of Nigeria's publicly traded oil and gas firms.

Interdisciplinary reporting that simultaneously integrates economic, environmental, and social factors into corporate behaviour is necessary to preserve resources for future generations because the business community has been under pressure from various sources over the past 40 years to fulfil its responsibilities to stakeholders, the environment, and the society in which it operates (Okafor, Adeusi, & Adeleye, 2019).

Generally speaking, the fact that sustainability reporting is voluntary and that firms choose what to share is a good thing since it aids in enhancing the company's image (Effiong, Oti, & Akpan, 2019). For long-term

prosperity, it's important to strike a healthy equilibrium between social, environmental, and economic outcomes. Due to a lack of detail addressing the social and environmental impacts of the company's operations, the financial statements are no longer sufficient for stakeholders. Therefore, companies are obligated to share any developments—financial or otherwise—that might affect their performance.

The study assessed how oil and gas companies listed on the Nigerian Stock Exchange (NSE) benefit from corporate sustainability reporting. These are the precise aims of the research:

- i. To understand the impact of CSR reporting on the ROA of the oil and gas companies listed on the Nigerian Stock Exchange;
- ii. To understand the impact of CSR reporting on the ROE of the oil and gas companies listed on the Nigerian Stock Exchange; and
- iii. To understand the impact of CSR reporting on the ROCE of oil and gas companies listed on the Nigerian Stock Exchange.

The study intends to achieve the research objectives with the following hypotheses:

- i.  $H_0$ : The impact of CSR reporting on the ROA of the oil and gas companies listed on the Nigerian Stock Exchange is not significant;
- ii.  $H_0$ : The impact of CSR reporting on the ROE of the oil and gas companies listed on the Nigerian Stock Exchange is not significant; and
- iii.  $H_0$ : The impact of CSR reporting on the ROCE of oil and gas companies listed on the Nigerian Stock Exchange is not significant.

## LITERATURE REVIEW/THEORETICAL FRAMEWORK

This section's objective is to provide a thorough literature assessment on the subject of financial performance and sustainability reporting. Along with a survey of important empirical material, it also includes a theoretical analysis.

### Conceptual Review

### Financial Performance

### Sustainability Reporting

“According to GRI (2019), the activity of measuring, revealing, and holding oneself accountable to internal and external stakeholders in order to fulfill the objectives of sustainable development is referred to as sustainable development reporting. Similarly, Umoren and & Ukpong (2022) define sustainability accounting as the sub-branches of accounting that deal with the activities, methods, and systems of the business to record, analyze, and report first the financial effects caused by environmental and social factors and then second the ecological and social effects of a specific economic system.” It is not merely a tool to generate reports using the data that has been gathered; rather, it is a way to internalize and strengthen an organization's commitment to sustainable development in a form that can be shown to both internal and external stakeholders. By providing stakeholders with this information, organizations, in the opinion of Akpan & Simeon (2021), inform them of how they are incorporating the concepts of sustainable development into their organizational objectives and day-to-day activities.

Sustainability reporting is one method for collecting data on and monitoring company efforts to relate well with its local environmental and also create good international relationship. Additionally, it may aid



companies and organizations with goal-setting, monitoring performance across all elements of sustainable development, and supporting the transformation to a resource-efficient and inclusive green economy (Ho & Taylor, 2007). It is commonly used interchangeably with triple-bottom-line reporting, which Effiong, Oti, and Akpan (2019) characterize as a complete framework for reporting the three performance criteria of firms. Arguments in favour of triple-bottom-line reporting for corporations have amassed. Managers may believe that it is financially beneficial to give back to the society and environment from which they extract economic resources and that the financial benefits from disclosures may offset any costs connected to non-disclosure. Another factor is that companies are more aware that they must account to a wide range of interested parties for how they use the economic, social, and environmental resources entrusted to them (Effiong, Oti, & Akpan, 2019). The board is urged to market the company to the public as one that is socially and environmentally responsible, in accordance with Principle 26 of the Nigerian Code of Corporate Governance. Companies that want to succeed must take on not just economic but also social, environmental, occupational, and community health and safety issues.

The disclosure of an organization's social footprint or influence on society is known as social sustainability disclosure. The focus of social performance indicators is on the effects that businesses have on the communities in which they operate. They also include information on how risks that can result from interactions with other social institutions are controlled and mitigated. The effects of organizations on both living and non-living natural systems must be disclosed, according to Effiong, Oti, and Akpan (2021), as part of environmental sustainability disclosure. Additionally, the input-output mode of an organization's environmental implications is an issue. The consumption of materials is considered an input, while the final product and waste emissions are considered an output. Companies may attempt to change how the public views their activities through environmental communication. Environmental reports, in the words of the European Environmental Agency (EEA 2008), are "the main vehicles for company communication on the environment and a fair and credible reflection of the company's environmental activities."

Since employees are so vital to a company's success, it's imperative that they have access to health and safety standards. This is done to make sure that the workplace is secure and that everyone's health is safeguarded. All components of the design and administration of the work system that impact how workers interact with the workplace are collectively referred to as the work environment. However, concerns about employee health and safety have led to calls for businesses to take social responsibility seriously (Effiong, Oti, & Akpan, 2019). Performance is hard to define and much harder to quantify. Actionable metrics that accurately reflect actual organizational performance are provided. Performance measures can be broken down into two broad groups: those that focus on outputs (such as competitiveness or financial performance) and those that focus on inputs (such as quality, flexibility, resource utilization, and innovation). This suggests that the concepts of outcomes and determinants might form the basis for performance evaluation procedures. Return on capital employed is considered a performance metric for this study.

## **Sustainability Reporting**

Activities of oil and gas companies in the environment makes the natural environment sometimes to have a negative effect on the environment. Consumption and the never-ending hunt for resources to meet a rising population's wants are some effects of population growth. Environmental risks are also a major factor in these effects. To find resources for the oil and gas companies, environments were being destroyed. According to Babangida (2019) this damage has led to the loss of freshwater resources, the degradation of natural resources, the thinning of the ozone layer, energy usage, pesticides, hazardous chemicals, nuclear power, and urbanization. There will be a shortage of food and disruptions to economic activity as a result of the effects of global warming, which also include hunger, drought, and floods.

GRI-G4 (Global Reporting Initiatives, 2017) defines sustainability reporting as a tool for evaluating and

disclosing organizational long- and short-term economic, social, and environmental performance. This promotes accountability and transparency among various stakeholders and aids the business in managing its operations in an environmentally friendly way. Sustainability reporting is a tactic that pushes management to include the company vision and purpose statement together with the economic, social, and environmental challenges. Corporate social responsibility, corporate governance, green and environmental accounting, ethics, human resource management, and other ideas that are related have all played a significant role in the development of sustainability reporting. In a similar spirit, Orazalin et al. (2019), Shafat, and Nasir (2018) claimed that businesses that take a proactive approach to addressing environmental and social issues would, in turn, produce organizational economic benefits over and above their rivals. Reporting on sustainability improved and accelerated the creation of a favorable workplace environment, which ultimately improved health and safety and raised employee morale, which in turn increased productivity. Costs will be decreased, sales turnover will rise, and profitability will grow.

### **Nigeria's Oil Companies and Corporate Social Responsibility**

Sustainability concerns from a wide range of stakeholders depend on the kind of industry. The impact of industrial activity on the economy, society, and environment varies widely between industries, sectors, and even nations. However, the majority of the advantages and disadvantages of economic activity are rather universal across most nations. The present state of globalization is largely to blame, and the oil and gas industry is not an exception. For instance, Nigeria and Saudi Arabia have very different political, social, cultural, economic, and legal systems, yet they share environmental, social, and health issues as a consequence of oil and gas exploration, production, and marketing. According to Ado et al. (2016), Aggaarwal (2013), and Bartels et al. (2016), some examples of these problems include oil spills, the social effect of the sector on local people, and macroeconomic challenges brought on by the influx of oil money.

The primary components of the petroleum sector are crude oil and natural gas. Only water outpaces petroleum in terms of global consumable resource production (Momin, 2013). It will be difficult to cease recognizing the worldwide relevance of oil and gas since they are a part of people's everyday lives (Abdulsalam et al., 2020). As a result of the intimate connections between oil and national policies, international politics, and power at the moment (Acti et al., 2013; Beredugo & Sunny, 2014), oil and gas are among the most significant resources in the world. For people, businesses, and the whole country, oil is a huge source of income. "According to Buccina et al. (2013), seven of the top twenty Fortune 500 businesses are oil corporations. One of the sectors spearheading the charge for sustainable development has been the oil industry. The extremely visible negative impacts of routine operations, such as oil spills and the ensuing demonstrations by civil society organizations and indigenous people, are at least partially to blame for this."

### **Environmental Problems in Sustainability Activities**

Environmental challenges, which are a crucial component of sustainability efforts, have all made climate change, global warming, and rising energy costs more prominent. Maintaining natural resources, including the atmosphere and minerals, is part of environmental sustainability. The basic resources required to meet human needs are protected. A man should not produce more garbage than the ecosystem can handle, and human consumption should acknowledge and highlight the principles of sustainable development. Depending on a person's occupation or how they utilize it, the idea of environment is seen differently by various individuals (Redclift, 1987). "Scholars have described the idea as natural environment, or environmental capital, which is a stock of natural resources and services such as soil, atmosphere, forests, water, seas, biomass, minerals, fossil fuels, and wetlands (Goodland, 1995). Some people believe that the environment encompasses all aspects of the world around us, including things like food, structures, local street traffic, open spaces, cities, and towns (Wheeler, 2004). According to some academics, the environment is what makes nature unique."

## Theoretical Review

This section investigates the many causes behind the positive effect that corporate sustainability reporting has had on the bottom lines of Nigeria's publicly traded oil and gas firms. Multiple perspectives were proposed, including stakeholder theory, RBP, and the concept of social costs.

### Stakeholders Theory

Ethics and morality in business management are the subject of "stakeholder theory," a school of thought in organisational management and business ethics. Edward Freeman proposed the idea in 1984. The phrase "stakeholders" refers to any individual, group, or organization that might be impacted by, or could have an impact on, the way a company operates. Creditors, customers, suppliers, employees, the government, the community, the environment, future generations, etc. are all examples of stakeholders that a company must answer to, according to the stakeholder theory espoused by Argandoña (1998).

Edward Freeman coined the term "stakeholder" in 1984. The basic idea is that a company shouldn't only make money for its owners but for everyone involved. The paper argued that sustainable practices might help businesses fulfil their ethical obligations to stakeholders while simultaneously delivering superior returns to shareholders. According to Freeman, a stakeholder is "any group or individual that can influence or is affected by the achievement of the organization's objectives." People from the general public, government agencies, investors, businesses, individuals, and workers all fall within this category. Because it addresses how a firm interacts with both its internal and external environments, stakeholder theory is important to this issue. The success of a business may be affected by how well its management communicates with its many constituencies. The management team should take into account stakeholder expectations about the organization's activities throughout the strategic planning process. Stakeholders, whether individuals or organizations, play an important role in the success of businesses since their efforts improve the firms' efficiency, profitability, reputation, and longevity (Igbekoyi, 2017).

This study assumes that stakeholder theory is significant because it offers a strong framework for outlining the interactions between an organization and its stakeholders in the operational environment. In order to reach its long-term objectives and keep its operations sustainable, the firm recognizes that it must be forthright and honest in its dealings with its key stakeholders. Stakeholders are deemed important when their participation is crucial to the survival and prosperity of the business. Stakeholders want management to act ethically and sustainably and to have a robust governance structure that informs strategic decisions (Nnamani et al., 2017). As a management theory, stakeholder theory was originally proposed. As a consequence, the corporation should be administered for the advantage of all of its constituents, including its customers, suppliers, owners, personnel, and local communities, as well as to secure the company's continuous existence. Decisions are grounded in corporate governance principles, which stipulate that they must incorporate stakeholder representation and the authority of the top management. Stakeholder theory in sustainability reporting is predicated on the premise that companies owe duties to groups other than shareholders who are socially and legally relevant (Barnett, 2007). These commitments are in addition to any legal or contractual obligations. Therefore, shareholders, employees, customers, vendors, and the community are all taken into account in stakeholder theory.

Since the impact of stakeholders and their expectations might change over time, organizations need to regularly adjust their operating and reporting routines, as stated by Bendheim, Waddock, and Graves (1998). In conclusion, businesses are seen as parts of a larger social system in the context of stakeholder theory. According to Grey, Javad, Power, & Sinclair (2001), companies identify stakeholders to decide which groups should be managed to further the company's objectives. It is the idea behind stakeholder theory that how businesses deal with these connections depends on many things, such as the type of business, the

importance of various stakeholder groups, and the personal values of those making decisions that affect the company's stock performance.

According to Buchholz & Rosenthal (2004), stakeholders are “individuals and constituencies that contribute, voluntarily or involuntarily, to its wealth-creating capacity and activities and who, as a result, are its potential beneficiaries and/or risk bearers.” Stakeholders are people who both supply vital resources to a company and put something of value “at risk,” and who also have the ability to influence the company's success. A company's ability to produce value depends on the quality of the bonds it maintains and develops with its many constituencies over time. Corporate behaviour is shaped by stakeholders in three ways: they set expectations for it, they experience its effects, and they evaluate whether or not the company's actions have met those expectations and how they've affected other people and businesses in the community (Wood & Jones, 1995). Stakeholder theory suggests that a business's level of corporate social responsibility may be gauged by how effectively it meets the requirements of its various stakeholder groups. Donaldson and Preston (1995) argue that firms are obligated to make this effort because it represents “an unavoidable cost of doing business.”

### **Indirect Social Costs Theory**

As described in his book “The Social Costs of Private Enterprise” (Sebastian, 2013), K. William Kapp created the notion of social costs. The premise for responsibility allocation is the business sector's non-economic impacts on the socioeconomic system. The equitable distribution of societal expenses is, in other words, a dilemma for contemporary corporate accountability. Additionally, attempts to measure social performance are influenced in an indirect manner by the literature on social costs. The phrase “social cost” refers to the same idea at a very fundamental level of study. The study of overseas economies has problems, according to the literature.

As societal revenues or losses may result, this dimension takes on significance in welfare economics. The ability to discriminate between societal and private gains or losses entails certain evaluation-related issues. The problem with social expenses is that it has to do with who pays for them and who is responsible for them. The latter generates the most discussion of the two (Stabile, 1993). This premise has significant ramifications for social duties since it assumes that the issue is how to defend government interference in the market and make it simpler to establish a “natural” equilibrium.

The state's function within the economic system may be seen as the state taking on obligations in order to maintain the national product and “citizens' welfare,” as well as the state's goal of covering social expenses. Therefore, its logical opposite should be to absolve the company of any obligations, even if indirectly or unwillingly. This problem makes it evident that covering social expenses is a contractual concern that must be covered by either the enterprise or the government (Coase, 1960). The problem was attempted to be shifted to corporate production factors by Coase (1960) from a different angle. The basic argument is that whether or not the state intervenes in the market is determined by the costs of the transaction between people and government; nevertheless, contracting is the only way to pay for social expenses.

### **Signaling Theory**

In 1973, Michael Spence developed the concept of signaling. According to this hypothesis, a firm's reporting methods operate as a conduit for signals between the organization and its surroundings, which in turn affects how well it performs (Jones & Murrell, 2007). According to Amaya et al. (2021), a company's regular reporting standards may help or hinder its success. Therefore, it is encouraged for businesses to do acts that mirror their business dealings and enhance their standing in society. By assessing them in an impartial manner, signaling theory helps us understand the reporting techniques used by organizations. According to Moratis (2018), signaling is the act of insiders (employees, managers, and shareholders) of a



company communicating or manipulating information to elicit a specific response from outsiders (investors, creditors, customers, the community, and the government) that will ultimately improve their performance. According to the idea of signaling, a corporation may be operating poorly, but nobody outside of it would be aware of it since it is sending signals that portray its performance as acceptable.

Several large companies, like Enron, WorldCom, and Lehman Brothers, have blamed their big failures on improper signaling. In that even though the company was doing poorly, the management continued to convey the message that everything was okay until they lost the ability to live up to the expectations of its stakeholders, which ultimately caused them to fail (Dwi et al., 2018). Businesses communicate with the public through their economic, environmental, and community disclosure practices. If these practices are effective, investors may rush to buy shares of a company's stock, which would improve the company's financial performance (Moratis, 2018). "This idea essentially states that the sustainability reporting practices of community disclosure, economic disclosure, and environmental disclosure, which are all subcategories of sustainability reporting, have the capacity to communicate with outsiders in a way that should enhance their financial performance."

A significant theory that supports this research is the agency hypothesis, which Jensen and Meckling put forth in 1976. According to this idea, the shareholders (principals) and management (agents) have a principal-agent relationship wherein the shareholders designate the management to oversee the company's activities. As a result, there will undoubtedly be a conflict of interest since the agents could be following their own objectives instead of the principal's. According to Nakabiito and Udechukwu (2008), sustainability reporting is a method for assessing management quality. The amount of information that management discloses is up to them, but they may use it to show shareholders and other stakeholders that they are operating effectively. Companies share value-relevant information with several stakeholders in order to lessen information asymmetries. Therefore, from the standpoint of agency theory, businesses voluntarily issue sustainability reports to cut down on agency costs, address information asymmetries, and avoid pressure from regulatory agencies.

Our theory is pertinent to our research because it clarifies the agency connection between the firm's management and its stakeholders, particularly when it comes to the dissemination of financial and non-financial information (Margolis, 2007). It is well known that there are informational and conflicting interests between firm executives (insiders) and shareholders and other stakeholders (outsiders). Investors' perception of risk increases dramatically when firms fail to make proper public disclosures (de Klerk & de Villiers, 2012). As a result, the market undervalues the shares or increases its demand for higher returns from companies that provide inadequate disclosure.

## **Theoretical Framework**

This study's foundation is the stakeholders' theory. This research uses stakeholder theory to investigate and clarify the impact that sustainability reporting practices have on the bottom lines of Nigeria's oil and gas firms. The management team should take into account stakeholder expectations about the organization's activities throughout the strategic planning process. Igbekoyi (2017) argues that stakeholders provide value to businesses via their individual and collective efforts to boost the company's bottom line, reputation, output, and overall sustainability. According to this theory, a company's primary responsibility is to its stakeholders and shareholders alike. Stakeholders are defined as people who are directly or indirectly impacted by the actions of a corporation. The long-held shareholder theory, proposed by economist Milton Friedman, claims that in a capitalist society, a corporation should solely be concerned with its shareholders and, consequently, its bottom line. This argument contradicts that theory. According to Friedman, companies' primary goals should be to maximize profits for their shareholders and grow their operations. Freeman, however, argued that all interested parties are relevant, saying that they are "groups of people because without their financial support, the firm will not survive; thus, all stakeholders are pertinent."

Relevant to this discussion is stakeholder theory, which analyses the interplay between an organization and its internal and external contexts.

The purpose of stakeholder theory is to establish which stakeholders are of most significance to a business. Management places a premium on this because they believe that having the backing of key stakeholders is what will determine their success (Rahman & Rahman, 2020). The writers Okafor, Adeusi, and Adeleye (2021) concur, stating that companies should evaluate which interest groups need to be managed in order to accomplish the firm's objectives after identifying their stakeholders.

This concept also implies that firms will need to broaden corporate planning to incorporate non-traditional stakeholders as environmental awareness grows. Since the opinions of stakeholders are increasingly important to a company's public image and bottom line, that company's management of its stakeholder connections sometimes takes the form of voluntary disclosures in annual reports or on the company's website. The argument rests on the premise that stakeholders have a vested interest in the firm and the power to influence its policies, strategies, and daily operations.

Because it is predicated on the idea that stakeholders want businesses to be socially and ecologically responsible, this theory is relevant to this research because it predicts that the market will reward companies for improving their economic, environmental, and social performance, which will in turn increase their value to shareholders. It is common knowledge that a company's investors are among its most important constituencies.

## **Empirical Review**

Several studies have examined how sustainable reporting affects Nigerian listed oil and gas companies' financial performance. Its findings are inconsistent. Contradictory literature inspired this study. According to Akinadewo et al. (2023), sustainability reporting impacts the financial performance of Nigerian listed industrial goods businesses. Annual reports and accounts from sample firms were utilized for ex-post facto examination. For variable relationships, panel data analysis and descriptive statistics like mean, standard deviation, minimum, and maximum values were used. Economic sustainability practice has a positive but insignificant link with total asset change (0.569) and a "significant" positive relationship with stock price change (0.034). Financial performance is positively and significantly affected by environmental sustainability practice (change in total asset and stock price with probability values of 0.025 and 0.012, respectively), while community involvement sustainability practice is positively and insignificantly affected (0.557 and 0.875). We observed that environmental sustainability reporting affects listed industrial goods companies' financial performance in Nigeria. To boost firm profits, the paper encouraged managers to adopt sustainable techniques.

Sustainable organizations require financial capital, good governance, and workplace practices that reflect present and future stakeholders' environmental and social needs, according to Onoh et al. (2023). Their research examined Nigerian listed oil and gas companies' Tobin's Q value after environmental, social, and economic sustainability reporting. Secondary data from annual reports was examined. Relationships and descriptive matrices are analytical techniques. Repeated regressions tested hypotheses. According to research, listed Nigerian oil and gas businesses benefit from environmental sustainability reporting. Economic sustainability reporting values listed Nigerian oil and gas corporations as less Sales growth and leverage had a negative impact on sustainability reporting and the firm value of Nigerian oil and gas companies, but firm size had a positive impact. The research concluded that sustainability laws appealed to investors and increased firm value. To increase long-term value, oil and gas companies should meet sustainability reporting criteria at 100%, according to the statistics.

Sustainability reporting harmed Nigerian listed oil and gas companies' financial performance from 2012 to

2021, according to Okon et al. (2023). Environmental, health, and safety disclosures determined the return on capital employed. Retrospective research, yearly reports, and Nigeria Exchange Group reports were used. Reliable panel least squares regression assessed the three study hypotheses. According to the study, social, health, and environmental disclosure boost Nigerian oil and gas companies' ROI. Studies have demonstrated that sustainability reporting impacts Nigerian oil and gas companies' ROI. Petroleum companies should require industry-wide sustainability reporting and apply a consistent sustainability index to evaluate compliance.

Omoren and Ukpong (2022) examined corporate sustainability reporting in Nigerian listed enterprises. Corporate attributes included business size, profitability, board size, and board diversity. Using ex post facto and content analysis. As of April 2022, Nigerian Exchange Group-listed companies' annual reports provided information. The firm's size, board size, board diversity, and sector exhibited positive and significant connections with sustainability reporting, unlike profitability, which had a negative and insignificant relationship.

Felix and Idowu (2021) offered statistical data from listed South African manufacturing firms. Sustainability reporting and performance by South African enterprises were examined. The data came from 10 listed South African industrial businesses from 2008 to 2017. The analysis used multiple regressions. Based on the study, corporate environmental disclosure positively impacts firm performance, but employee disclosure (ED) has no effect. The study found that adding sustainability reporting to financial statements may raise sales revenue by giving firms a competitive edge.

Akpan and Simeon (2021) examined sustainability disclosures' effects on stockholder cash flow returns in Nigerian oil and gas businesses. Secondary data and ex post facto research were used. Time series and cross-sectional analysis were used to study oil and gas companies listed on the Nigerian Stock Exchange as of December 31, 2020, from 2014 to 2020. Sustainable metrics were collected via content analysis. Listed Nigerian oil and gas companies' cash flow return on investment has a significant positive impact on social sustainability disclosure, but environmental and health disclosure have negligible effects.

For Girón et al. (2020), sustainability reporting and enterprises' economic performance in Asia and Africa were examined to see what factors impact the adoption of new sustainability reporting standards and external assurance. We used regression to analyze data from the Orbis and Sustainability Disclosure Databases. Sustainability and company performance are linked.

Three-bottom-line disclosures affected Nigerian oil marketing businesses' shareholders' value added, according to Effiong, Oti, and Akpan (2019). Secondary data came from the NGX Factbook and the yearly reports of the businesses under investigation posted on the Nigeria Exchange Market's trading floor. An ex post facto disclosure checklist followed GRI guidelines. The cash flow returns on investment, market value added, and economic, social, and environmental performance reports of oil and gas marketing companies had a significant impact on these three measures.

Green practices and performance drivers in the Chinese construction sector were examined by Ying, Ronggui, and Tao (2019). The study employed structural equation modelling to validate the recommended relationship. The study found that project team knowledge would help implement environmental practices. Organizational and environmental performance may improve with environmental practices. According to the findings, environmental practices are not necessarily driven by government principles. Due to rapid economic expansion, China's environmental regulations don't address them. According to the research, China should employ all its resources to implement strict green laws, regulations, standards, and recommendations to protect the environment.

Nwaiwu and Oluka (2018) examined how environmental cost disclosure affected Nigerian-listed oil and gas

companies. The Nigerian central bank’s annual reports and economic reviews provided time-series data. Linear regression and Pearson product-moment correlation were used. After arbitrary effects, environmental cost disclosure did not affect ROA. Environmental cost disclosure affects firms’ financial performance and may affect listed oil and gas enterprises’ future profitability (ROA). Environmental cost disclosure did not affect ROCE, contrary to conventional models. Ecological cost transparency boosts oil and gas companies’ EPS. Companies should practice strong corporate environmental stewardship, according to a study. Separating environmental costs from other expenditures will properly allocate costs and support sustainability metrics. Evaluating environmental expenses may aid in accounting. Additional pollution and greenhouse gas emission data may be needed in accounting. The environmental regulatory authority should be more diligent in declaring environmental cost components separately for effective reporting.

This study evaluated papers on sustainable reporting and Nigeria’s publicly listed oil and gas companies’ financial performance. However, none of them could combine economic, social, and environmental performance criteria to demonstrate sustainable reporting. Using these three variables and others like ROA, ROE, and ROCE to measure Nigerian oil and gas businesses’ financial performance has made this research robust.

## METHODOLOGY

Historical data that was employed made this study to use ex-post factor research. This study includes 10 Nigerian oil and gas companies listed from 2011 to 2020. The use of census sampling included filtering. Businesses must be listed before January 1, 2009, and through December 31, 2019 to be eligible. Annual firm reports are needed during the research period. These eliminated five unsuitable firms. Secondary data for this study came from the identified firms’ annual reports and standalone sustainability reports. This study used E-View 10 statistical software.

It was an ex-post facto study. Due to the inquiry’s post-event introduction without the researcher’s participation and the study’s data availability,

Population: 10 industrial goods businesses from the study’s base year. The 1970 Krejcie and Morgan approach computed the sample size. Every 10 oil and gas businesses were sampled.

Secondary data was gathered from 2011–2020 oil and gas company annual reports. Internal and external auditors should have reviewed the data and ensured that it accurately depicted the financial performance of the oil and gas businesses in order for conclusions to be valid.

This study uses the same econometric model as Asoquoa et al. (2018) and Burhan and Rahmanti (2012). This study used this model.

$$\text{Financial performance} = f(\text{sustainable reporting}) + \varepsilon_1 \text{ ----- (i)}$$

$$\text{Financial performance} = f(\text{Economic Performance Disclosure, Social Performance Disclosure, and Environmental Performance Disclosure}) + \varepsilon_1 \text{ ----- (ii)}$$

The model was thus adjusted as follows to include a control variable:

$$ROA_{it} = \alpha_0 + \alpha_1 ECN_{it} + \alpha_2 ENV_{it} + \alpha_3 SOC_{it} + \alpha_4 LEV_{it} + \varepsilon_1 \text{ ----- (iii)}$$

“Net profit after taxes divided by total assets is ROA (Asuquo et al., 2018; Burhan & Rahmanti, 2012; Fuadah, 2019).”



“According to Burhan & Rahmanti (2012), Bowers (2010), and Fuadah et al. (2019), ECN is the ratio of items reported to total disclosure under environmental sustainability.”

“Asuquo et al. (2018) and Burhan & Rahmanti (2012) define environmental sustainability disclosure (ENV) as the ratio of items revealed to the total amount disclosed.”

“Gunarsih & Ismawati (2018) and Kasbun et al. (2019) define SOC as the ratio of social sustainability disclosure items to total disclosure.”

“According to Fuadah et al. (2019), Pouraghajan (2012), and Yahaya (2018), LEV firm leverage is the ratio of total debt to total assets.”

$i$  = firm under consideration;  $\alpha_0$  = constant or intercept;  $\alpha_{1-4}$  = independent variable coefficients;  $\epsilon_1$  = error term;  $t$  = time period.

## RESULTS, ANALYSIS AND DISCUSSION OF FINDINGS

Here, we’ll analyze the collected data in order to determine how much of an effect sustainability reporting has on the bottom lines of Nigeria’s publicly traded corporations. The research also tested the predictions made in the introduction. In a similar spirit, this section provides an in-depth evaluation and explanation of the findings of the current study.

### 4.1 Descriptive Statistics

**Table 4.1 Descriptive Statistics Analysis.**

VARIABLE	MEAN	STANDARD DEVIATION	MINIMUM	MAXIMUM
ROA	0.0330	0.318887	-1.86	0.243
ECN	0.6812	0.294210	0.13	0.857
ENV	0.2619	0.316920	0	0.600
SOC	0.3851	0.306647	0.326	0.865
LEV	0.2369	0.852646	0.076	1.350

**Source: Researcher’s Computation EViews-10, 2023.**

Table 4.1 displays descriptive statistics for all of the research variables. Return on assets (ROA) has a mean value of 0.0330 as well as a standard deviation (SD) of 0.318887, according to the data supplied. Nigeria’s oil and gas firms had an average return on assets of 3.3%. This means that investors may expect a return of 0.33 kobo for every unit of cash put into the company’s assets. Significant scattering around the mean may be seen in the 0.318887 standard deviation. Certain businesses have a negative return on assets (ROA) in certain years, which causes the standard deviation to move far away from the mean in such years. At a mean of -1.86, the lowest possible return represents an adverse return on assets. Large financial losses sustained over several years may be an indication of poor business performance. However, an average return of 24.3% is generated from the company’s assets.

There is a standard deviation of 0.857 for the financial sustainability disclosure (ECN), with a mean value of 0.6812. This data suggests that Nigerian oil and gas companies reveal around 68.12 percent of their financial performance. The variation of mean values, which ranges from a low of 0.13 to a high of 0.778, demonstrates that all businesses in the sample exhibit financial performance rates between 13% and 85.7%. In terms of environmental sustainability (ENV), the average reporting of the analyzed businesses is 0.2619,

which means that on the whole, these companies are transparent about 26.19% of their efforts. The low standard deviation of 0.316920 indicates widespread conformity between businesses with regards to environmental reporting practices. A minimum mean of 0 suggests that not all companies reported their commitment to environmental responsibility for that year. The maximum mean value of 0.600 indicates that companies rarely reveal more than 60.0% of their commitment to environmental sustainability.

The average SOC reporting rate is 38.51 percent, with a standard deviation of just 0.306647. Only 3.6% of companies surveyed reported on their social sustainability practices, whereas 86.5% reported making all required disclosures. Table 4.1 provides a summary of the debt-to-total-assets ratio (LEV) as it relates to financing oil and gas companies. Debt accounts for around 23.69% of these companies' total assets on average. In any case, the standard deviation of 0.852646 shows that debt was employed by most businesses to finance their assets. Certain firms may opt to utilize no debt at all to fund their assets in certain years (as shown by a minimum mean of 0.076), while the maximum mean of 1.350 indicates that the financial obligation of certain businesses amounts to approximately 135% of their total assets.

## 4.2 Inferential Statistics

### Test of Hypotheses

**Table 4.2 Variance Inflation Factor (VIF) Test for Multicollinearity**

Variance	VIF	1\ VIF
SOC	2.430	0.9255
ECN	2.145	1.0500
ENV	1.815	1.2375
LEV	1.815	1.3065
Mean VIP	2.025	

**Source: Researcher's Computation EViews-10, 2023.**

It is advised that the variance inflation factor (VIF) not go over 4, as per the multicollinearity concept. However, a VIF score over 4 indicates multicollinearity, whereas a value below 10 is still regarded as being within an acceptable range. According to the numbers in Table 4.2, there is no variable with a VIF value higher than 4. There is no evidence of multicollinearity across the variables that are independent in this study, indicating that they are not connected with one another.

**Table 4.3: Breusch-Pagan/Cook-Weisberg Test for Heteroskedasticity.**

Variables	ECN	ENV	SOC	LEV	OVERALL
Chi <sup>2</sup> (1)	24.315	12.090	31.680	95.385	102.825
Prob>Chi <sup>2</sup>	0.000	0.000	0.000	0.000	0.000

**Source: Researcher's Computation EViews-10, 2023.**

The Breusch-Pagan/Cook-Weisberg test for heteroskedasticity was run, and the results are shown in Table 4.3. Independent variables (IVs) and residuals (or error terms) are assumed to be unrelated in the linear regression model. Thus, the residuals should be unaffected by changes in the IVs. It is crucial that the residuals display a constant variance in order to comply with the rules of regression analysis and guarantee the trustworthiness of the results. Therefore, homoscedasticity is assumed in the null hypothesis. Table 4.3's results demonstrate that the Chi<sup>2</sup> probabilities for all variables are lower than the significance level of 0.05. These factors seem to be statistically significant at the 5% level. This suggests that the absence of heteroskedasticity, the null hypothesis, is plausible.

**Table 4.4: The Results of Chen-Shapiro QH\* Test Conducted On The Normal Data.**

Variable	Observations	QH	QH*	P-Value
ROA	115	1.222335	2.436465	< 0.00015
ECN	115	1.564155	-0.562965	> 0.30000
ENV	115	1.361970	1.211250	< 0.00015
SOC	115	1.484280	0.138000	< 0.00783
LEV	115	1.356765	1.256895	< 0.00015

**Source:** Researcher’s Computation EViews-10, 2023.

Chen-Shapiro QH\* test results for data with a normal distribution are shown in Table 4. A normality test looks at how closely a dataset matches a normal distribution. It also makes an effort to guess the probability that the seed random variable follows a distribution that is normal. Large data sets, particularly those with continuous data, may not exhibit a normal distribution due to the inherent variances within the data set. The fact that the data does not follow the typical distribution is the null hypothesis (H0) for the first aim. There is a very strong association between return on assets (ROA) and the dependent variable, as shown by the p-value of 0.0001 or lower shown in Table 4.4. Since the p-value for the ECN’s correlation with the dependent variable is more than 0.2, we cannot conclude that the two are in any way related. Both ENC and LEV are less than 0.0001, whereas SOC has a value of 0.00783. Statistical analysis shows that there is a significant relationship between ROA, ENV, SOC, and LEV in the 5% range (p 0.005). This indicates that there may be something off with the data set’s distribution. However, a p-value of 0.2 shows that SOC follows a distribution that is normal, which is not statistically significant at the 5% level. A negative result from a normality test indicates a non-normal distribution of data. The investigation thus rejects the null hypothesis and indicates that the data set is not normally distributed. To address the non-normality issue, the investigators used a trusted approach to calculating standard errors.

**Table 4.5: The Model Specification Test**

(a) The Omitted Variable Test	(b) The Random Effect Test	(c) The Houseman Test for Fixed Effect
F (5, 104) = 9.72	Chibar <sup>2</sup> (01) = 0.06	Chi <sup>2</sup> (4) = 10.98
Prob. > 0.0009	Prob. > Chibar <sup>2</sup> = 0.636	Prob. > Chibar <sup>2</sup> = 0.180

**Source:** Researcher’s Computation EViews-10, 2023.

“The results of the Ramsey RESET test are shown in Table 4.5(a). Return on assets (ROA) power estimates are used in this test to probe for unobserved factors. There is no such thing as an omitted variable, according to the omitted variable error test’s null hypothesis. In the table, it can be seen that the ROA variable was subjected to a Ramsey test, yielding findings of a F value of 9.72 and a Prob. > F value of 0.0009. Since the Prob. > F value is significant at the 5% level, it is known that there are no blanks in the ROA model.”  
 “Table 4.5(b) displays the results of the Breusch and Pagan Lagrangian multiplier tests for random effects, proving the reliability of the models used in this study. The null hypothesis, in a random effect model definition test, is that there are no hidden random variables. A chi-square of 0.06 and a corresponding p-value of 0.636 are shown for the ROA in the table. The results do not contradict the null hypothesis at the 5% level of confidence. This criticism suggests the presence of a panel effect in the dataset.”

“Table 4.5(c) summarizes the results of a Hausman specification test applied to the fixed effect in the return on assets (ROA) model. The Hausman test is used to choose between the fixed effects and random effects models. Thus, the Hausman test’s null hypothesis implies that the dissimilarity in coefficients cannot be effectively described by a normal test. According to the table, the chi-square test yielded a significance level of 0.180 (prob > chi-square) and an overall chi-square value of 10.98. According to these findings, the observed difference in coefficients was not significant at the 5% level of analysis. This implies that there is a systematic cause for the disparity in coefficients. Since it is desirable to reject the null hypothesis, it is

necessary to employ the random effect model.”

**Table 4.6: ROA Regression Analysis Result**

ROA	Coefficient	Robust Std. Errors	z	P > z	95% Interval	Confidence
ECN	0.0120	0.2445	0.075	1.4415	-0.4680	0.4920
ENV	0.1905	0.1005	2.835	0.0870	-0.0060	0.3885
SOC	0.4845	0.4335	1.680	0.396	-0.3660	1.3350
LEV	-0.4680	0.1440	-4.950	0.0015	-0.7635	-0.1950
Constant	0.0150	0.0420	0.540	1.0780	-0.066	0.0960
R <sup>2</sup> Overall	0.816					
Wald Chi <sup>2</sup>	85.8300					
Prob > Chi <sup>2</sup>	0.0000					

Source: Researcher’s Computation EViews-10, 2023.

$$ROA_{it} = 0.0150 + 0.0120ECN_{it} + 0.1905ENV_{it} + 0.4845SOC_{it} - 0.4680LEV_{it}$$

### Discussion of Findings

The impact of sustainability reporting on return on investment (ROI) among publicly listed Nigerian oil and gas companies is seen in Table 4.6. A common indicator of a business’s health is its return on assets (ROA). The ECN variable in Table 4.6 is positively associated with 0.0120 and represents the extent to which businesses publicize their efforts to foster economic sustainability. The p-value of 0.961 for this coefficient is likewise very low. The results show that the ECN is related to the stock prices of Nigerian firms that trade in crude oil and natural gas. However, the significance of the finding is very improbable, with a p-value of 1.4415. For the sampled businesses, a positive effect of ECN on ROA does exist, although it is not statistically significant. This demonstrates that requiring publicly traded oil and gas companies in Nigeria to report differently on economic sustainability will not alter their return on assets. Similar results were found in this research by Agu and Amedu (2018). This lends further support to the alternative theory.

The coefficient indicates that there is a positive correlation between ENV and environmental sustainability (0.1905). The p-value for this finding is less than 0.05, making it statistically significant. Coefficients with large positive values suggest that environmental awareness in companies is correlated with economic performance. This association is very probable, as shown by the p-value of 0.05, which corresponds to a 5% level of significance. Publicly traded oil and gas firms in Nigeria benefit directly from environmental sustainability efforts. The results suggest a connection between environmental reporting and monetary performance as assessed by return on assets (ROA). Therefore, it is essential for a company’s long-term viability that its leadership make its environmental performance transparent. Kabir et al. (2019) and Whetman et al. (2020) are two previous studies that provide support for this current discovery. The explanation offered by the interested parties is given greater weight. The findings of the research suggest that oil and gas companies in Nigeria might benefit from environmental reporting by demonstrating their commitment to addressing the concerns of locals and stakeholders. It may be useful to the firm if a higher proportion of their inquiries were addressed. Second, there is little support for the idea that publicly listed oil and gas businesses in Nigeria would gain financial ground by making environmental preservation a top priority.

The impact of the sustainable development report (SOC) on the return on investment (ROI) of several Nigerian oil and gas corporations may lead to similar conclusions. SOC has a positive effect on ROA, as shown by the coefficient value of 0.4845. The computed p-value was 0.396, which is not statistically significant at the 5% level. This data demonstrates that the SOC has a negligible effect on return on investment for Nigeria’s publicly traded oil and gas companies. The third hypothesis is supported by these findings. The p-value of 0.001 shows statistical significance at the 1% level for the negative association



between LEV and a variable evaluating the quality of maintenance. Proof that LEV kills profits for Nigeria's oil and gas firms

On top of that, the model is right and can help people make better decisions. The R square value of 0.816 shows that disclosing economic, social, and environmental performance had a combined effect on financial performance of 81.6%. Similarly, a Wald chi square of 85.8300 indicates statistical significance with a probability value of 0.000.

### **Implications of Findings**

As shown in Table 4.6, the regression results show that the total corrected  $R^2$  value of the various coefficients of determination is 0.554. Indicative of the extent to which the independent factors explain the overall variation in the dependent variable. This data lends credence to the theory that the disclosures on the environmental, economic, and social effects of Nigeria's publicly listed oil and gas firms account for around 55% of the variance in their return on investment (ROI). Using the Wald chi-square test, we find that the combined sustainability and return-on-assets model has a score of 57.22, with a p-value of 0.000. The model's effective utilization of the independent variables is shown. It is possible that if oil and gas firms in Nigeria reported their efforts to promote sustainability in a different light, their return on investment (ROI) might be drastically different.

## **CONCLUSION AND RECOMMENDATIONS**

The results of the study's empirical analysis and the testing of its hypotheses support the idea that sustainability reporting is useful for Nigeria's publicly listed oil and gas firms. In any case, this influence creates positive feedback loops that strengthen the ecosystem overall. Based on these findings, it seems that publicly traded oil and gas companies in Nigeria might benefit from being more transparent about their efforts to improve sustainability. If sustainability reporting is to serve its purpose, information concerning a company's impacts on the environment, economy, and society must be shared freely and honestly. The selected oil and gas firms will lose out if they place profits above people and the planet.

Companies' sustainability performance may be reported more openly if the government and regulatory agencies provide incentives and encouragement. The fact that reporting compliance is optional may help to explain the low rate observed in petroleum, oil, and many other listed businesses. For the highest possible level of compliance, the Nigerian government should mandate sustainability reporting from oil and gas companies trading on the Nigerian stock exchange.

There is a need for governments and regulatory bodies to set reporting standards for certain sectors. These suggestions are meant to enhance the credibility of reports by taking into account the particulars of diverse industries. Industry-specific criteria may be helpful for ensuring reliable reporting.

## **CONTRIBUTION TO FUTURE RESEARCH.**

Changes in total assets and stock price are indicators of how the company is doing financially after disclosing its sustainability efforts. The research suggests that further study should investigate how sustainability practices impact the financial performances of other business using ROA, ROE and profitability index among others. Future studies may also use the existing econometric model to further gauge sustainability reporting practices.

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